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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,621	02/15/2001	Diether Rueppel	1998 / F-085	1893

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EXAMINER

TRAN, SUSAN T

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 09/05/2003

21

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/744,621	RUEPPEL ET AL.	
	Examin r	Art Unit	
	Susan Tran	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-35 is/are pending in the application.
- 4a) Of the above claim(s) 34 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of applicant's Request for Extension of Time and Request for Continued Examination filed 05/27/03.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/27/03 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 18, 19, 22-24, and 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Jankower et al. EP 0 351 943.

Jankower teaches process for producing solid polymer microparticles useful as controlled release delivery system for active substances intended for a wide range of uses (see abstract; and columns 3-4). The microparticle/microbeads having size range

Art Unit: 1615

from 1-200 μm are formed of curable elastomers, including cycloolefins (column 2, lines 15-53). The process is disclosed in columns 5-6, and examples.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 17, 19-22, 27, 28, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. US 6,358,520, in view of Hasslin US 5,674,514.

Lo teaches pesticides composition comprising microencapsulated pesticides in polymeric shell in the form of a matrix for controlled release (columns 2-5). The polymeric shell containing water soluble polymer, such as polyethylene, polyvinylpyrrolidone, and copolymers (column 3, lines 46-62). The composition further comprises surfactant, and the microparticle having diameter of about 3 μm (ID). Lo does not teach the claimed copolymer, such as cycloolefin.

Hasslin teaches formulation comprising particles containing pesticide mixture, polymer, and copolymer (columns 1-3). The polymer or copolymer can be mixtures of olefin, polyolefin, and cycloolefin, such as, cyclopentene or norbornene (column 3, lines 33-65). The formulation further comprises surfactant, emulsifying agents, or dispersant (columns 6-8). The particles obtained having diameter from 0.5 μm to 12 μm (column 9, lines 11-48). Thus, it would have been prima facie obvious for one of ordinary skill in

the art to modify Lo's copolymer using the cycloolefin in view of the teaching of Hasslin, because the references teach the advantageous result in the use of pesticides composition in microparticles form. The expected result would be microcapsule in a matrix for controlled release of pesticides.

Claims 16-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jankower et al., in view of Epple et al. US 5,376,725.

Jankower is relied upon for the reason stated above. Jankower is silent as to the teaching of the specific cycloolefin.

Epple teaches alloys of cycloolefin polymers and polyaryl ether ketones as a matrix material for composite materials or for the production of shape articles (abstract). Epple also teaches that cycloolefin homo-and copolymers are a class of polymer with an outstanding level of properties and processed thermoplastically (column 1, lines 13-55). Cycloolefin having viscosity of greater than 20 cm³/g and glass transition temperature of between 100° and 200°C is being used (column 4, lines 1-7). Thus, it would have been obvious for one of ordinary skill in the art to modify the controlled-release microparticles of Jankower using the cycloolefin copolymers in view of the teachings of Epple, because the references recognize the advantages results in the use of cycloolefin, e.g., durability under pressure and temperature.

Response to Arguments

Applicant's arguments filed 04/22/03 have been fully considered but they are not persuasive.

Applicant argues that Jankower does not disclose nor teach that the microparticle comprises a thermoplastic cycloolefin copolymer as claimed. In response to applicant's argument, although Jankower does not specifically teach that the cycloolefin is thermoplastic, it is the position of the examiner that the cycloolefin taught by Jankower is generic, and it permits the use of thermoplastic cycloolefin.

Applicant argues that Lo's active substance is encapsulated in a shell, while the active substance of the claimed invention is not microencapsulated in a shell but is embedded into the polymer matrix (see specification page 2 and claim 18). Contrary to the applicant's argument, it is noted that the feature upon which applicant relies (i.e., embedded into the polymer matrix) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Hasslin teaches cycloolefin in a laundry list, and it is noted that the list of the specific examples of commercially available polymers does not list cycloolefin. Contrary to the applicant's argument, Hasslin discloses *cycloolefins as his first suitable polymers out of twenty-two polymers* to be used in his invention. With regarding to the list of examples of commercially available polymers, Hasslin's invention cannot be limited to his best mode as described in the examples.

Applicant argues that Hasslin does not give a hint to modify the embodiment of Lo in the sense of the present invention in order to render the advantageous microparticle of the present invention. In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Both, Lo et al. and Hasslin recognize the use of polymer to obtain a stable pesticide composition. Lo teaches the use of polymer but is silent as to the specific type of polymer, such as cycloolefin. Hasslin teaches a storage stable pesticidal composition comprising polymer, such as polyolefin.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Tran whose telephone number is (703) 306-5816. The examiner can normally be reached on Monday through Thursday from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3592.

Application/Control Number: 09/744,621

Page 7

Art Unit: 1615

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600